

CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM STATEMENT OF INVESTMENT POLICY

FOR THE INFLATION ASSETS

July 1, 2011~~April 11, 2011~~

This Policy is effective upon adoption and supersedes all previous policies on inflation-linked assets, commodities, and inflation-linked bonds, ~~infrastructure, and forestland.~~

I. PURPOSE

The California Public Employees' Retirement System ("CalPERS") Total Fund Statement of Investment Policy, adopted by the CalPERS Investment Committee ("Committee"), sets forth CalPERS overarching investment purposes and objectives with respect to all its investment programs.

This document sets forth the investment policy ("Policy") for the Inflation ~~Linked Asset Class~~ ("IL Asset Class" or "Program"). The design of this Policy ensures that investors, managers, consultants, and other participants selected by the CalPERS take prudent and careful action while managing the Program. Additionally, use of this Policy assures sufficient flexibility in managing investment risks and returns associated with this Program.

The Program includes ~~two~~^{four} components: commodities and inflation-linked bonds~~infrastructure, and forestland~~. The Policy includes investment guidelines for the Program structure followed by an attachment for each component.

A. Attachment A – Commodities ("Commodities Program") and

B. Attachment B – Inflation-Linked Bond Program ("ILB Program")

II. STRATEGIC OBJECTIVE

The Program shall be managed to accomplish the following:

- A. Prudently achieve long-term returns above inflation;
- B. Diversify CalPERS investments; and
- C. Hedge against inflation risks.

III. RESPONSIBILITIES

A. CalPERS Investment Staff ("Staff") is responsible for the following:

1. All aspects of portfolio management including monitoring, analyzing, and evaluating performance relative to the appropriate [benchmark](#).
2. Reporting to the Committee annually and more if needed about the performance of the externally managed programs; and quarterly or more frequently if needed about the performance of the internally managed Programs.
3. Monitoring the implementation of, and compliance with, the Policy. Staff shall report ~~material concerns, problems, material changes~~ and all violations of Guidelines and Policies ~~at the next quarterly report to the Committee meeting, or sooner if deemed by the Chief Investment Officer ("CIO") as necessary, in a timely manner and in writing to the Committee.~~ All events deemed materially important will be reported to the Committee immediately. These reports shall include explanations of any violations and appropriate recommendations for corrective action.

The Senior Investment Officer, ~~Global Fixed Income~~ IL Asset Class ("SIO-~~LAC~~Global Fixed Income") will be responsible for the Program, ~~and may delegate investment management of Program assets to either external managers or other internal units.~~

B. The [General Consultant](#) ("Consultant") is responsible for:

Monitoring, evaluating, and reporting periodically to the Committee, on the performance of the Program relative to the benchmark and Policy.

C. For those programs that are managed by an External Manager ("Manager"), the Manager is responsible for aspects of portfolio management as set forth in each Manager's contract with CalPERS and shall, at a minimum, fulfill the following duties:

1. Communicate with Staff as needed regarding investment strategy and investment results.
2. Monitor, analyze, and evaluate performance relative to the agreed upon benchmark.
3. Cooperate fully with CalPERS Staff, [Custodian](#), and consultant assigned to the Program concerning requests for information.

IV. PERFORMANCE OBJECTIVE AND BENCHMARK

~~A. The performance objective is to outperform the Program benchmark, net of all fees, over rolling five-year periods.~~

A. The performance objective for the Program is to exceed the benchmark, net of all fees .

~~B. and t~~The benchmarks for the Program and for each of the two~~four~~ components are specified in the Policy for Benchmarks Modification and Benchmark Details Policy.

V. INVESTMENT APPROACHES AND PARAMETERS

~~A. IL Asset Class Program Allocations~~

The specific Investment Approaches ad Parameters for the components of the program (ILB and Commodities) are detailed in the appropriate attachment.

Program allocation targets and ranges are listed ~~in Table 2~~ below. Allocations are expressed as a percentage of the market value of the CalPERS fund.

~~Table 2: Program Allocations:~~

<u>Component</u>	<u>Target*</u>	<u>Range*</u>
Commodities	<u>1.05%</u>	0.50% - 3.00%
Inflation-linked bonds	<u>31.0%</u>	<u>1.00.50%</u> - <u>53.00%</u>
Infrastructure	1.5%	0.00% — 3.00%
Forestland	1.0%	0.00% — 2.00%
IL Asset Class	<u>45.0%</u>	<u>1.500.00%</u> - <u>75.00%</u>

* Percentage of the CalPERS Fund.

~~The allocation ranges in Table 2 will apply when the market value of Program assets equals or exceeds two percent of the CalPERS fund.~~

~~B. Prohibited Investments~~

~~Ineligible investments include the following:~~

~~1. Tobacco companies; and~~

~~2. Any investment prohibited by CalPERS Insider Trading Policy or Restricted Company list.~~

~~3. Any other Committee-approved restriction.~~

VI. CALCULATIONS AND COMPUTATIONS

Investors, managers, consultants, and other participants selected by CalPERS shall make all calculations and computations on a market value basis as recorded by CalPERS Custodian.

VII. GLOSSARY OF TERMS

Key words used in this policy are defined in CalPERS Master Glossary of Terms.

Approved by the Policy Subcommittee:	April 11, 2011
Adopted by the Investment Committee:	May 16, 2011
Policy Effective:	July 1, 2011

The following attachments were previously individual policies, and have been consolidated into the Liquidity Program policy. The dates below reflect the revision history for these documents:

Policy on Inflation-Linked Asset Class

Approved by the Policy Subcommittee:	December 14, 2007
Adopted by the Investment Committee:	February 19, 2008
Technical Revision to Reflect Benchmark Name Change:	December 15, 2008
Administrative changes made due to Policy Review Project:	June 16, 2009
Admin changes due to adoption of Benchmark Policy:	October 12, 2009
Revised by the Policy Subcommittee:	April 19, 2010
Approved by the Investment Committee:	May 17, 2010

Attachment A – Commodities Program

Approved by the Policy Subcommittee:	December 15, 2006
Adopted by the Investment Committee:	December 18, 2006
Revised by the Policy Subcommittee:	December 14, 2007
Approved by the Investment Committee:	February 19, 2008

Attachment B – Inflation-Linked Bond Program

Approved by the Policy Subcommittee:	December 14, 2007
Adopted by the Investment Committee:	February 19, 2008
Technical Revision to Reflect Benchmark Name Change:	December 15, 2008

COMMODITIES PROGRAM

July 1, 2011~~April 11, 2011~~

I. PURPOSE

This attachment to the Inflation-~~Linked Assets~~Glass Policy sets forth the investment policy ("Commodities Policy") for the CalPERS commodities investments ("Commodities Program"). The Commodities Program includes [overlay](#) exposures and [collateral](#) investments.

II. STRATEGIC OBJECTIVE

The Program shall be managed to accomplish the following:

- A. Enhance CalPERS risk-adjusted returns;
- B. Diversify CalPERS investments; and
- C. Hedge against inflation risks.

III. RESPONSIBILITIES

Responsibilities are described in the Inflation-~~Linked Assets~~Glass policy, Section III.

IV. PERFORMANCE OBJECTIVE AND BENCHMARK

- A. The performance objective for the Program is to outperform the Benchmark, net of all fees.~~The Commodities Program benchmark is the S&P GSCI Total Return Index ("S&P GSCI TR Index").~~

~~B. The performance objective is the benchmark, net of all fees.~~

V. INVESTMENT APPROACHES AND PARAMETERS

- A. Permitted Investment Instruments

The following classes of Commodities Program overlay instruments are permitted:

- 1. [Futures](#) contracts;
- 2. Forward contracts;

3. [Swaps](#);
4. [Structured notes](#); and
5. [Options](#).

Individual positions may be long or short the [commodity](#) risk exposure.

Direct investments in physical commodities are not permitted.

[Derivative](#) Instruments may be standardized and exchange traded (e.g., futures), or privately negotiated and over-the-counter ([OTC](#)), e.g., swaps.

B. Instrument Risk Exposure

The risk exposure of the investment instruments may be long or short, or a combination of both.

The underlying risk exposure may be to a [cash commodity](#) or a commodity derivative.

Instruments incorporating multiple commodity risk exposures, such as commodity baskets and commodity indices, are allowed.

The risk exposure for exchange traded instruments is with the exchange's clearinghouse, and with the approved [counterparty](#) for OTC transactions.

C. Listing Requirements

Exchange traded commodity futures, options and any related instruments may be traded on any exchange regulated by the [CFTC](#) (Commodities Futures Trading Commission) or the [FSA](#) (Financial Services Authority) of the United Kingdom, or on any exchange that lists a commodity future included in the Commodities Program benchmark.

D. Counterparty Requirements

1. Counterparty creditworthiness, for non-exchange traded derivatives, shall be at a minimum of "A3" as defined by Moody's Investor Service, "A-" by Standard & Poor's and "A-" by Fitch. The use of counterparties holding a split rating with one of the ratings below A3/A- is prohibited. The use of unrated counterparties is prohibited unless the counterparty is a wholly owned affiliate of a parent company that unconditionally guarantees payment and meets the above credit standards.

2. Individual counterparty exposure, for non-exchange traded commodity derivatives, is limited to the 40% of the net notional option-adjusted exposure of the Commodities Program at the inception of a new position. An exception is allowed if the total non-exchange traded commodity derivatives exposure is less than \$1 billion.
3. Swaps shall be settled monthly.
4. Any entity acting as counterparty shall be regulated in either the United States or the United Kingdom.

E. Other Risk Management

1. **Liquidity risk** shall be managed by adhering to the above counterparty requirements.
2. **Legal risk** will be minimized by engaging in over-the-counter (OTC) derivative transactions only where such transactions are enforceable under the laws of the governing jurisdiction and will be governed by an International Swaps and Derivatives Association, Inc. ([ISDA](#)) agreement where applicable.
3. **Pricing risk** will be minimized by using standardized or market accepted instruments for OTC derivatives. Exchange-traded derivatives will be used when appropriate to minimize pricing risk.
4. **Sector risk** will be mitigated by maintaining net option-adjusted commodities exposures within plus and minus twenty percentage points of benchmark weights for the following commodity overlay sectors: energy, metals, and “soft” commodities (currently food and other agricultural products). The benchmark commodity index provider will be the source in determining the sector of individual commodities. Each of these three sectors shall have a positive net option-adjusted commodities exposure.

F. Commodity Collateral

1. Collateral Market Value

The market value of the commodities collateral shall be maintained at 100% or greater of the net option-adjusted notional value of the commodities overlay exposure at the time of any new commodities overlay position. The intent of this constraint is to avoid incurring economic [leverage](#) (commodities value exceeding the value of the

collateral) due to investing in commodities, while recognizing that the amount of collateral relative to the amount of commodities exposure may drift from time to time due to a variety of possible factors, which may cause the collateral value to drop below the value of commodities. If the collateral market value falls below the net option adjusted value of the overlay, portfolio adjustments will be made at the earliest opportunity to bring the collateral value up to the notional value of the overlay.

2. Permitted Investments

The following classes of Commodities Program collateral investments are permitted.

- a. Units of an internal short term investment fund (“STIF”);
- b. Inflation linked bond investments held in the IL Asset Class (subject to no more than 20% of the Commodities Program);
- c. Cash or treasury debt obligations used for futures margin requirements; and
- d. Any receivable due from an approved counterparty to a commodity-related investment.

~~Approved by the Policy Subcommittee: December 15, 2006~~

~~Adopted by the Investment Committee: December 18, 2006~~

~~Revised by the Policy Subcommittee: December 14, 2007~~

~~Approved by the Investment Committee: February 19, 2008~~

INFLATION-LINKED BOND PROGRAM

July 1, 2011~~April 11, 2011~~

I. PURPOSE

This attachment to the Inflation-Linked Assets Class Policy sets forth the investment policy ("Policy") for Inflation-Linked Bond investments (ILB Program).

II. STRATEGIC OBJECTIVE

The Program shall be managed to accomplish the following:

- A. Enhance CalPERS risk adjusted returns;
- B. Diversify CalPERS investments; and,
- C. Hedge against inflation risks.

III. RESPONSIBILITIES

Responsibilities are described in the Inflation-Linked Assets Class policy, section III.

IV. PERFORMANCE OBJECTIVE AND BENCHMARK

A. The performance objective is to outperform the Benchmark, net of all fees. ~~The ILB Program benchmark is a blend of 66.7% Barclays Capital Global Inflation-Linked U.S. and 33.3% Barclays Capital Global Inflation-Linked FR, DE, IT, JP, GB only, unhedged.~~

~~B. The performance objective is to outperform the benchmark, net of all fees.~~

V. INVESTMENT APPROACHES AND PARAMETERS

~~In consideration of the initial phase-in period needed to implement a new ILB Program and the difficulty of achieving cost-effective diversification for small portfolios, the permitted ranges in subsections A, C, D, and E4 of Policy section V apply when the market value of the ILB Program exceeds \$1 billion. The other Policy language applies at all times.~~

A. Permitted Investments and Ranges

ILB Program targets and permissible ranges as a percentage of total portfolio are listed below:

Sector	Policy target	Permitted range
Total investment grade inflation-linked government bonds	100%	80-100%
U.S. inflation linked bonds	67%	47-87%
Investment grade international inflation-linked bonds	33%	13-53%
Non-government investment grade inflation-linked bonds	0%	0-10%
Investment grade nominal government bonds	0%	0-10%
Short-term fixed income	0%	0-10%
Non-investment grade inflation-linked government bonds	0%	0-5%

The market value of non-index investments, defined as the sum of the last four rows of the above table, shall not exceed 20% of the ILB Program.

[Derivatives](#) with risk and return characteristics substantially similar to bonds or bond indices included in the Program benchmark are permitted. Any use of derivatives shall be in compliance with the CalPERS Derivatives Investment Policy as stated in Section IX of the CalPERS Dollar-Denominated Fixed Income Program Policy.

B. Interest Rate Risk

Interest Rate Risk is the price volatility produced by changes in the overall level of interest rates as measured by option-adjusted [duration](#). Duration shall be maintained at $\pm 10\%$ ~~one year~~ of the benchmark duration.

C. Sovereign Ranges

The non-U.S. segment of the ILB benchmark is a custom benchmark of ILBs issued by selected countries in the Barclays Capital Global Inflation Linked Index based on size and liquidity criteria. The selected countries and weights as of ~~September 30, 2011~~February 28, 2011 are listed in the table below and may be revised based upon periodic review.

Issuer	Benchmark Issuer Weight*	Range
United Kingdom	15%	5-25%
France	9 <u>10</u> %	0-19 <u>0-20</u> %
Italy	5%	0-15%
Japan	23 <u>2</u> %	0-12 <u>0-3</u> %
Germany	21 <u>2</u> %	0-12 <u>0-4</u> %

* Benchmark issuer weights as of ~~September 30, 2011~~February 28, 2011. Total may not sum to 100% due to rounding.

The minimum portfolio allocation to each non-U.S. country shall be the greater of either zero or ten percentage points less than the benchmark weight. The maximum ILB investment by country shall be ten percentage points greater than the benchmark weight. The resulting permissible allocation ranges by country as of ~~September 30, 2011~~February 28, 2011 are listed in the right column of the above table.

D. Currency Risk

Currency Risk is the risk of having different weights in currency than the index. The permissible currency ranges shall be consistent with the sovereign ranges (Section V.C.) of $\pm 10\%$ of the benchmark weights. The table below lists the currency ranges as of ~~September 30, 2011~~February 28, 2011. Note, since Italy, France and Germany use the Euro as a currency, the upper end ranges for each country have been combined to equal ~~46~~45% top end range for Euro exposure (France, Italy and Germany's top range is 20%, 15% and 11% respectively).

Currency Allowable Ranges:

Currency	Benchmark Weight*	Range
Euro	16 <u>5</u> %	0-46%
UK Sterling	15%	5-25%
Japanese Yen	23 <u>2</u> %	0-12 <u>0-3</u> %

*Benchmark weights are as of ~~September 30, 2011~~February 28, 2011.

E. Restrictions and Prohibitions

1. Except for government issuers, investments in a single issuer shall not exceed 2% of the Inflation-Linked Bond Portfolio during the holding period for such investment. For [High Quality LIBOR](#) and [STIF](#), no single issuer limit exists.
2. Non-investment grade securities are not to exceed 5% of the total portfolio.
3. Portfolio [leverage](#) is not permitted at any time.
4. Sections V.A and V.C of this attachment specify sector and issuer ranges.
5. All non-US securities must be compliant with the [Foreign Debt Policy](#) which specifies minimum credit ratings. The Foreign Debt Policy is included as Attachment B1.

Approved by the Policy Subcommittee: _____ December 14, 2007

Adopted by the Investment Committee: _____ February 19, 2008

Technical Revision to Reflect Benchmark Name Change: _____ December 15, 2008

FOREIGN DEBT POLICY

July 1, 2011~~April 11, 2011~~

I. Local-Currency Debt of National Governments and All Debt of Corporations and Subnational Governments (i.e. Provincial, State and Municipal)

1. Both the issuer and issuer's national government (if the issuer is not the national government itself) must be rated investment grade, at least BBB- by [S&P](#) or [Fitch](#), or Baa3 by [Moody's](#). Even in the case of local-currency debt, this requirement must be satisfied by long-term foreign currency ratings instead of local-currency ratings, which are generally higher because a country can easily print more of its own currency to meet its local debt obligations. This unconventional, very conservative application of the rating requirement will give extra protection against the special foreign-exchange valuation and retrieval risks of local currency.
2. The country must be part of the Barclays Capital Global Aggregate Index, a widely followed index which includes only those local markets that are fairly liquid and fairly well developed.
3. The country's currency must be fully convertible in the spot market for foreign investors, so that Managers may retrieve CalPERS funds without limit or obstruction.

II. Global Debt Issued by National Governments

The policy stipulation for global debt issued in major markets differ somewhat for holdings denominated in major non-dollar currencies and for holdings denominated in the dollar. The difference is found on the approach to limiting portfolio concentration in emerging markets, while minimum credit rating requirements are the same for both. The stipulation is as follows:

For externally managed portfolios, global bonds issued by national governments must have a credit rating of BB- or higher from S&P or Fitch and Ba3 or higher from Moody's

Benchmark

A set of securities with associated weights that provide a passive representation of a manager's investment process. The benchmark return is usually used to measure a manager's performance results.

Cash Commodity

A physical commodity, not a commodity future, the prices of which can be different for a variety of reasons

Chief Investment Officer

Heads the CalPERS Investment Office and works with the Investment Committee to develop a long-term investment policy and asset allocation strategy for the Public Employees' Retirement Fund.

Collateral

Assets used as a support for financial risk, and can be used to fulfill financial obligations. In the context of futures, the collateral on deposit as margin in brokerage accounts is typically low risk financial assets such as cash, Treasury bills or bonds held by the futures brokerage firm as security against adverse market moves of futures positions.

Commodities and Futures Trading Commission (CFTC)

An agency of the U.S. federal government that regulates the U.S. commodity futures and options markets. The CFTC is responsible for insuring market integrity and protecting market participants against manipulation, abusive trading practices, and fraud.

Commodity

A commodity is a good that can be traded and delivered. The prices of commodities are determined on the basis of an active market. Typically commodities are of uniform quality and are produced by many different producers. Physical commodities, which can be stored, include energy (oil and its products, natural gas), metals (both industrial and precious), and agricultural products (grain, livestock, other "softs"). Non-physical commodities include electricity and emission credits

Counter-Party

The entity which is in the opposing position to a transaction.

Custodian

A bank or other financial institution that provides custody of stock certificates and other assets of an institutional investor.

Derivative

An instrument whose value is based on the performance of an underlying financial asset, index, or other investment. Classes of derivatives include futures contracts, options, currency forward contracts, and swaps.

Duration

A measure of price sensitivity to interest rate changes. Duration is the anticipated percentage move in price given a 100 basis point (1 percent) move in interest rates.

Fitch Ratings (Fitch)

A nationally-recognized credit rating agency that grades the investment quality of bonds in a 10-symbol system. The ranges extend from the highest investment quality, which is AAA, to the lowest credit rating, which is D. Securities rated BBB- or greater are considered investment-grade. Securities rated BB+ or below are considered to be speculative.

Foreign Debt Policy

CalPERS' guidelines for permissible country debt investments, as most recently amended.

FSA

The Financial Services Authority in the United Kingdom. This is the main independent financial regulatory agency in the UK, authorized by the government. The FSA regulates most financial services markets, exchanges and firms in the UK.

Futures

Exchange-traded contracts to buy or sell a standard quantity of a given instrument, at an agreed price, and date. A future differs from an option in that both parties are obliged to abide by the transaction. Futures are traded on a range of underlying instruments including commodities, bonds, currencies, and stock indices.

General Consultant

An individual or organization that provides specialized professional assistance to the CalPERS Board of Administration in determining the pension fund's asset allocation model or optimal combination of investments in order to maximize risk-adjusted investment returns in a manner consistent with CalPERS' long-term pension liabilities.

Global Debt

Debt issued by a national government, subnational entity or corporation denominated in the U.S. dollar or other major currency and issued in major markets, typically New York or London, under the laws of those markets.

High Quality LIBOR

A limited-duration, highly liquid, LIBOR-based fund managed by CalPERS staff.

Investment Grade

A minimum credit rating of Baa3 by Moody's Investor Service or BBB- for Standard & Poor's Corporation, and BBB- by Fitch. Investment grade ratings apply to issuers whose financial risk is relatively low and the probability of future payment relatively high.

ISDA

ISDA is an acronym for the International Swaps and Derivatives Association. ISDA represents participants in the privately negotiated derivatives industry, and is the largest global financial trade association. ISDA has pioneered efforts to identify and reduce the sources of risk in the derivatives and risk management business through the development of the ISDA Master Agreement

Leverage

A condition where a portfolio's market obligation may exceed the market-value-adjusted capital commitment by the amount of borrowed capital (debt).

Local Currency Debt

Debt issued by a national government, subnational entity or corporation denominated in local currency and issued in the local market, under local laws.

Moody's Investors Service (Moody's)

A nationally-recognized credit rating agency that grades the investment quality of bonds in a 9-symbol system. The ranges extend from the highest investment quality, which is Aaa, to the lowest credit rating, which is C. Securities rated Baa3 or greater are considered investment grade. Securities rated Ba1 or below are considered to be speculative.

Option

Contracts that give the purchaser the right, but not the obligation, to buy or sell an underlying instrument at a certain price (the exercise or strike price) on or before an agreed date (the exercise period). For this right, the purchaser pays a premium to the seller. The seller (writer) of an option has a duty to buy or sell at the strike price, should the purchaser exercise his right.

Over the Counter (OTC)

The market for securities and traded products that are not listed on the major exchanges. OTC options are options with negotiated premium, strike price, and expiration date.

Overlay

An investment process which is used to modify the risk profile of a portfolio using financial instruments. An overlay can either increase or decrease exposure to a set of financial risk factors.

Risk

A measurable probability of losing or not gaining value. Risk is differentiated from

uncertainty, which is not measurable. Risk in this context is also referred to as "standard deviation", which is a statistical measure of the degree to which an individual value in a probability distribution tends to vary from the mean of the distribution.

Standard & Poor's (S&P)

A nationally-recognized credit rating agency that grades the investment quality of bonds in a 10-symbol system. The ranges extend from the highest investment quality, which is AAA, to the lowest credit rating, which is D. Securities rated BBB- or greater are considered investment grade. Securities rated BB+ or below are considered speculative.

State Street Bank Short-Term Investment Fund (STIF)

An institutional money market mutual fund managed by State Street Global Advisors.

Structured Note

An instrument representing a financial obligation created by modifying one or more standard financial obligations or instruments (i.e., a bond or mortgage) to create a risk/return profile or cash flow payment stream. This type of risk or return profile differs from the standard financial instrument from which it derives.

Swap

Private agreement between two companies to exchange cash flows in the future according to a prearranged formula.